Flowers in India and their place in fables, festivals and folklore, gardening and Rose breeding in the different Indian climates. M.S. Viraraghavan, 2000

At the outset I would like to thank the President and members of the Garden Club , and my friend Mercedes Villas, for inviting me to talk to you on various aspects of flowers in India, and their place in fables, festivals and folklore, as well as various plants we grow, particularly in the mountain climate where I do my gardening.

To understand India you must realize its scale - its vastness as a geographical entity with so many different climates, and its complexity as one of the world's oldest civilizations.

First, a few words on India's geography and climate. India covers 3.28 million sq.kms from 8° North to 40° North of the Equator, a length of over 1600 miles. India's capital, New Delhi is 30°N as against Montevideo which is 35° S of the Equator. But, climatically, there are two moderating factors, one the monsoon which is a wind system which brings rain from June for 4-5 months, the rest of the year being dry, and two, the Himalayas - the greatest of the world's mountain chains, which stretch for over 1600 miles, from western ice deserts in Ladakh to astonishingly moist regions in the east in Assam. In fact, one area has over 500 inches of rainfall - the world's highest figure. The Himalayas being well over 20,000 feet over most of the range, effectively prevents the Indiaward movement of cold air from the frozen highlands of Central Asia and Siberia. So, India's climates are quite different from other places in the same latitudes. Such a great diversity of climates supports a great variety of plant life, ranging from alpines in the heights of the Himalayas to the tropical flora of South India. India has 45000 different plant species - the widest range of any country of its size of which 5000 are exclusive. There are 15000 flowering and tree species.

Again, when you deal with India you are dealing with an unbroken thread of civilization stretching to over 5000 years. But India's history is full of strange gaps largely due to the ancient tradition that the spoken word is of greater value than the written one. What the ancients meant was that the oral tradition was a direct link from the Gods through the sages to man, whereas the written word is secondary in nature.

Throughout the centuries the dominant religion of India - Hinduism has worked as a strong integrating force, rather than as a divisive one. In Hinduism, the Almighty is symbolized by the Trinity of Brahma, Vishnu and Shiva, representing the forces of creation, protection and destruction. But the more ancient gods- the gods of nature and its forces - fire, sea, rain and wind, still find a place in Hinduism, along with countless other manifestations of the Divine.

One other interesting aspect is that India, while to a great extent a Hindu country, is also one of the most populous of Islamic countries, with an association with Islam stretching to almost 1000 years. Even more interesting perhaps is the fact that India is one of the original Christian countries - one of the apostles, St.Thomas, arrived on the shores of India nearly 2000 years ago. Then again, India is the home of Buddhism, which is a religion which has spread greatly, particularly to eastern as southern Asia.

In this background it is not surprising that the relationship in Hindu society between religion, nature, plants and the land is very close indeed. Many aspects of this closeness are particularly evident in South India which was largely spared the foreign invasions so common a feature of North Indian history of the 4 South Indian languages, Tamil is by far the most ancient and may well predate the Sanskrit language which is the Latin of India.

Tamil classical poetry (100 B.C.to 2000 A.D.) provides some fascinating insights into how the ancients viewed God and nature. In the world of poems the Tamil country was divided into 4 kinds of regions each presided over by a deity and named after a characterestic flower or tree, Mullai, a variety of jasmine, represents the forests overseen by the darkbodied god of herdsmen, Vishnu, Kurinji (strobilanthes kunthianus) a mountain flower, stands for the mountains, overseen by Muruga (Shiva) the red speared god of war, youth and beauty. Marudam (lagerstroemia flos regina) a tree with red flowers, growing near water, for the pastoral regions overseen by Indra , god of thunder and rain. Nethal a water flower (nymphae stellata) for the sandy seashore overseen by Varuna the wind god. The fifth region is Palai or desert, overseen by the demonic goddess of war, Koravai, and the characteristic tree is the Palai - (ivory wood tree, Wrightia tinctoria). In classical Tamil poetry the 5 regions or landscapes are associated with different phases of love, for example, lovers

union is associated with the mountain, and separation with the desert region.

As can be seen, the link between classical Tamil poetry and nature is close indeed. Man, plants, and animals each had their place- a thought which would be welcomed by modern environmentalists. Two ancient fables bring out this aspect. One is the story of Pairi a great chieftain, who, seeing a jasmine creeper trailing on the ground without a support ordered that his chariot should be so placed that the jasmine could climb through it. In another fable, the poet has the king returning from war, advising his charioteer to slow down the galloping horses of his chariot, lest the noise disturb the stag and doe in the forest.

Basic to an understanding of India are its villages, where the vast majority of its people still live . A typical village is centred around the temple and guarded by the village guardians, Ayyanars. The main features of a temple are the temple spire, (often elaborately carved with images of gods) beneath which is a sanctum sanctorum housing the deity of a particular God. There is always a small tank where lotuses are generally grown. In the area surrounding the sanctum sanctorum are images of lesseer gods and semidivine beings. In Shiva temples a prominent place is reserved for Shiva's steed, the bull (Nandi). Surrounding the temple are the village houses with roofs of tile or thatch (made of dried leaves of coconuts or other palms). Each house is decorated by elaborate designs made of rice flour and coloured powder called kolams, which are considered auspicious. Such kolams on a large scale are also a feature of temples (slides).

While there is daily worship in temples, festivals are special occasions where vast quantities of flowers are used for decoration and worship in the shape of garlands and bouquets. These festivals are closely linked with nature and village life. In South India the harvest festival of Pongal, celebrated in January, when the rice is harvested is an occasion when a pudding made of rice is mandatory. Cattle, so essential for successful farming, are given special attention, - cows are gaily decorated, and the bulls have their horns painted. Another festival which is celebrated all over India, is Divali, the Festival of lights symbolising the victory of good over evil. Every house will be gaily decorated with kolams (designs) and many oil lit lamps will sparkle in the night, and fire crackers will be burst- it is a festival all children love. In North India, the Spring Festival of Holi, where people paint each other with coloured powders is celebrated with gaiety and abandon . India celebrates many festivals, throughout the year, all colourful and merry, and

all requiring the use of flowers, made into garlands and as loose or single flowers.

A distinctive feature is the growing of flowers for garland making. The favourite flowers for this are the rose, and the jasmine with others like marigold, nerium and tuberose. The lotus has a special place - it is India's national flower - and flowers like aster and small flowered chrysanthemum are used for bulk.

Other plants which are significant in village life are the banyan tree (ficus bengalensis) and the Flame of the Forest (Butea frondosa) the leaves of which are stitched to make cups and plates.(slides).

Farming and festivals apart, village life is also centred on the weekly fair where all articles of daily use - foodgrains, condiments, vegetables can be bought. To this day the bullock cart is the means of transport for bringing produce for sale.

The Palni Hills (2000 sq.kms) with its main town Kodaikanal, where I live, represents the heartland of the hill (kurunji) area of Tamil classical poetry. As mentioned earlier, Murugs (Shiva) is the god of the Palnis and his flower is the climbing glory lilly, gloriosa superba. This is so beautiful a flower that we are told that the taxonomist who first gave the plant its name was so enraptured by its beauty that he exclaimed "Its glorious, its superb" and named it gloriosa superba. Gloriosa is a common plant in the middle elevations of the Palni Hills. Also closely associated with Muruga is the peacock, his bird and stone images of the peacock are special features of temples dedicated to Muruga.(show slides of gloriosa superba, gloriosa superba variety rotschildiana, peacock).

What of the Kurunji (Strobilanthes) after which the region is named? This extraordinary plant bears a profusion of violetblue flowers once in every 12 years. When the kurunji is in bloom an entire hillsides appear blue from a distance, Hence the English name of Blue Mountains for these hills. This habit of flowering once in 12 years, with unfailing regularity has earned the plant a place in folklore (show slides of kurunji).

The Palnis, which vary in height from about 800 kms to 2500 kms are among the most beautiful areas in South India. The heavy rainfall on the hilltops (1600 mms) makes it an unique watershed on which farming in the plains below depend. The Landscape is of rolling hills, covered in the valleys by evergreen forests and open places with grasslands.

This area supports a wide variety of wildlife - elephants, Indian bison(the worlds tallest cattle) tigers, leopards, mountain goats (called tahr) deer and giant squirrels(show landscape slides).

The flora of the region is equally interesting with a strange mixture temperate and tropical plants. Among the temperate species are the beautiful red rhododendron, R.arboreum, 2 kinds of hypericum, mahonia(m.leschinaultiana) a wild rose species (Rosa leschinaultiana), Osbeckia (a shrub related to your South American tibouchina), a lily(lilium nilgerense) and a variety of impatiens(show slides of native species).

Kodaikanal has a very special climate - that of a tropical mountain. Some call it "eternal spring". Summer temperatures never exceed 25°C, and winter minimum are 3°C. So we have an extraordinary juxtaposition of plants - bananas and apples grow happily alongside each other. Such a salubrious climate is wonderful for growing a wide range of flowering plants. Many of the Aurtralians - acacias, eucalyptus and bottlebrushes thrive amazingly, as do South Africans - gladiolus species, bird of paradise (strelitzia), not to speak of South Americans - passionflowers, daturas (brugmansias) all of which I grow. (show slides)

But my basic interest is roses - growing and breeding them. Many Heritage and modern roses do well - the Hybrid Perpetuals like Fran Karl Druschki and Paul Neyron, many Tea roses and ramblers like Albertine and Excelsa, and nearly all modern roses. I have been hybridising roses for many years so I grow all my many varieties. I have been very keen on hybridsing what is called the "handpainted strain" in roses, which was originated by Sam Megredy's variety "Picasso" (show slides of handpainted roses) While breeding roses for India, it became apparent early on that a separate line was needed for the tropics. With 2 Indian rose species - Rosa clinophylla and Rosa gigantea as the base, I have raised several hybrids. Rosa clinophylla in particular, which grows in the tropical plains of India has great potential as a parent for new roses which will do well in the warmer parts of the world. One very interesting characteristic of this species is that it can grow in water like a water lily. (show slides of clinophylla, clinophylla in water , Gigantea, one our latest seedlings).

The Palni Hills are an almost exact northern counterpart of the mountains of Papua New Guinea where thrive the most exotic of the vast rhododendron family, called the Vireya Rhododendrons. These grow like orchids (as epiphytes) in their native habitat and do very well in Kodaikanal. They bear flowers in brightest shades of orange and yellow, many are fragrant, andthe foliage is very attractive. I feel you could try growing them.(show slides)